

**REMARKS**

This preliminary amendment adds no new matter to this application and is supported by the specification. Reconsideration of the application is respectfully requested in light of the following remarks.

**I. REJECTIONS FROM OFFICE ACTION DATED JUNE 10, 2005.**

In the Office Action of June 10, 2005, the Examiner rejected Claims 1-24 and stated that a new issue was raised in claim 21. The Examiner further stated that the Applicant's arguments were unpersuasive.

In the previous Office Action from March 21, 2005, the Examiner had rejected claims 1, 3, 4, 6, 9-21 and 24 under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 5,859,596 ("McRae"). Claims 2, 5, 7, 8, 22 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over McRae in view of Macrodyne Inc. Model 1690 Phasor Measurement Unit Product Description ("Macrodyne"), Applicant's Admissions of the prior art, or Power System Applications for Phasor Measurement Units ("Burnett").

Applicant respectfully offers that the pending claims are patentable in light of the above amendments and the following remarks. Accordingly, Applicant respectfully requests the Examiner withdraw the pending rejections under § 102(e).

**II. REJECTIONS OF INDEPENDENT CLAIMS 1, 21, AND 24 UNDER 35 U.S.C. § 102(E) FROM THE MARCH 21, 2005 OFFICE ACTION.**

Independent claims 1, 21, and 24 stand rejected under 35 U.S.C. § 102(E) as being unpatentable over *McRae*. Applicant notes that *McRae* fails to disclose or describes all the limitations of claims 1, 21, and 24.

Both claim 1 and claim 24 relate to a monitoring device for an electric circuit. Both claims 1 and 24 claim systems for measuring the delivery of electrical energy from an energy

supplier comprising a digital network and monitoring devices coupled to the network. The monitoring devices comprise at least one sensor or sensing means, at least one analog to digital converter or converting means, and a processor or processing means.

Claim 1 further discloses a plurality of communication ports coupled with the digital network and operable to send and receive communications over the digital network with said first processor. Each of the first and second devices are operable to engage in a first communication from a first communication port of the plurality of communications ports substantially simultaneously with engaging in a second communication from a second communication port of the plurality of communications ports. Each of the plurality of communications ports of the first device are operable to communicate with at least one of the plurality of communication ports of the second device.

Claim 24 further discloses a communicating means for receiving communications from the digital network and transmitting the communications to the processing means. Each of the first and second devices are operative to engage in a plurality of substantially simultaneous communications. The first device is further operative to communicate with the second device over said digital network.

Claim 21 relates to a method for measuring the delivery of electrical energy from an energy supplier. The method comprises sensing an electrical parameter with a sensing device and generating an indicative analog signal, converting that signal to a digital signal, generating a computed value from the digital signal, receiving communications from the digital network and processing communications. Finally, the method comprises engaging in substantially simultaneous communications over the digital network where at least one communication is between multiple devices.

McRae discloses “a plurality of monitoring devices...connected to respective pieces of switchyard equipment and associated with a common communications network. A remote host computer is connected to the network to bi-directionally communicate with each monitoring device. The communications network is the existing power line used for delivering power and control signals to the switchyard equipment. Each monitoring device includes testing and/or monitoring circuitry for testing and/or monitoring one or more conditions of the piece of switchyard equipment and generating condition data therefrom, a storage device for storing the generated data, and a transmitter adapted to transmit the data to the remote location via the power line. The remote host computer receives the data transmitted to the remote location and stores the received data therein in a database format. The monitoring device can request previously sent data from the remote host computer. The monitoring includes an RS-232 port for accepting a local computer which conducts tests of the switchyard equipment, analyzes the results, compares the results with previous tests, and reprograms alarm parameters and baseline values associated with the switchyard equipment.” McRae, Abstract.

McRae fails to disclose a “plurality of communication ports operative to receive communications from said digital network” and “said plurality of communication ports being coupled with said digital network” as in claim 1. McRae also fails to disclose “each of the plurality of communications ports of said first device are further operable to communicate with at least one of the plurality of communication ports of said second device over said digital network.” McRae does disclose a communications port 47 and a power line interface 52. McRae, Figure 3. The power line interface is connected to the power line, which operates as a network, and therefore the power line interface 52 is a single communication port connecting monitoring devices. Claim 1 discloses a plurality of communication ports operative to send and

receive communications over the digital network. The communications port 47 in Figure 3 of McRae is merely connected to a node computer 30. McRae, Figure 3, Abstract, and Col. 4, lines 32-39. “The node computer 30 is a portable or notebook personal computer.” McRae, Col. 4, lines 32-33. The node computer 30 is not another measurement device and it is evident from Figure 1 that the node computer does not connect to a digital network or to the power line carrier and therefore does not allow communications between monitoring devices. Because the communications port 47 is merely connected to a node computer and not any other measurement devices in the system, the communications port 47 does not communicate with communications ports from other measurement devices as in Claim 1. McRae fails to disclose a first and second device comprising a plurality of communication ports, wherein the each of the plurality of communication ports of the first device are operative to communicate with at least one of the plurality of communication ports in the second device. McRae only discloses one communication port in its monitoring device that is operative to communicate with a communication port in another monitoring device. McRae, col. 3 lines 64-67. McRae does not disclose a plurality of communication ports, each operative to communicate with at least one communication port from another monitoring device. The other communication ports disclosed in McRae are not operative to facilitate communications between monitoring devices. Each monitoring device has only one communication port operative to communicate with other monitoring devices.

Claim 21 discloses “engaging in a plurality of substantially simultaneous communications over said digital network, wherein at least one of said substantially simultaneous communications comprises at least one communication between said first and second devices.” McRae fails to disclose this because McRae merely discloses one

communication port capable of communications between monitoring devices as discussed above. McRae, col. 3 lines 64-67. Therefore, there are not simultaneous communications between individual monitoring devices because each monitoring device only has one communication port operative to communicate with other communication ports.

Claim 24 discloses “communicating means for receiving communications from said digital network and transmitting said communications to said processing means, wherein each of said first and second devices are operative to engage in a plurality of substantially simultaneous communications using said communicating means.” As discussed above, McRae only discloses one communication port capable of communications between monitoring devices and therefore is not operative to engage in a plurality of substantially simultaneous communications. See McRae, col. 3 lines 64-67. The other communications ports in McRae are not capable of communications between monitoring devices and not operative to engage in a plurality of substantially simultaneous communications from the monitoring devices.

While McRae does disclose multiple communication ports, only one of the ports in McRae is connected to a digital network and operative to communicate with other devices. As discussed above the other port (port 47) is connected to a node computer, rather than being connected to a digital network and specifically, port 47 does not allow for communication between monitoring devices because port 47 is not connected to a digital network with other monitoring devices. Figures 1 and 3 show the monitoring device connecting to the power line (network) on one end and connecting to a node computer on the other, rather than being connected to the network through multiple communication ports.

McRae does disclose one more communication port other than communications port 47 and the power line interface 52. McRae discloses that a “connection between the remote host

computer 22 and the communications node 20 is an RS-232 link 23, or the like.” McRae, col. 4 lines 14-21. This communications port is between the remote host computer 22 and the communications node 20. This is not a communications port present in a measurement device as in claims 1, 21 and 24. Further, this communications port does not allow for communications between measurement devices. As can be seen in Figure 1 of McRae, communication port 23 is connecting the remote host computer 22 and the communications node 20, and is not connected with any of the monitoring devices 18 and port 23 is not operative to facilitate communications between monitoring devices.

For at least these reasons, McRae does not anticipate independent claims 1, 21 and 24. Accordingly, Applicant requests that the Examiner withdraw this rejection of Claims 1, 21 and 24. Dependent claims 3, 4, 6 and 9-20 were also rejected pursuant to 35 U.S.C. § 102(e) as being anticipated by McRae. Dependent claims 3, 4, 6 and 9-20 should be allowed for the reasons set out above for the independent claims. Applicant therefore requests that the Examiner withdraw this rejection of these claims.

New Claim 25 is allowable for the reasons discussed above. Specifically, McRae fails to disclose a “first device and said second device further compris[ing] a plurality of communication ports, each of said plurality of communication ports in said first device are operable to communicate with each of said plurality of communication ports in said second device.” McRae discloses only one communication port that is operative for communications between monitoring devices.

Applicant would like to reserve the argument that McRae is not prior art. This application is a divisional of U.S. Pat. No. 6,694,270, which claims priority to U.S. Pat. No. 5,650,936, filed on December 30, 1994. Therefore, this application claims priority to December

30, 1994, whereas McRae was filed August 30, 1996 and issued January 12, 1999. However, regardless whether McRae is prior art, McRae fails to disclose all of the elements of the claims as discussed above.

**III. REJECTION OF DEPENDENT CLAIMS 2, 5, 7, 8, 22 AND 23 UNDER 35 U.S.C. § 103(a) FROM THE MARCH 21, 2005 OFFICE ACTION.**

Claims 2, 5, 7, 8, 22 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over McRae in view of Macrodyne, Applicant's Admissions of the prior art, or Burnett. The combination of McRae with Macrodyne, Applicant's Admissions of the prior art, or Burnett does not render claims 2, 5, 7, 8, 22 and 23 unpatentable because the combination fails to disclose or describe all the limitations of this claim.

**CONCLUSION**

Applicants respectfully submit that all of the pending claims are in condition for allowance and seeks early allowance thereof. The Examiner is invited to call the undersigned if it would expedite the prosecution of this application.

Respectfully submitted,

8-16-05  
Date

Scott A. Timmerman  
Scott A. Timmerman  
Registration No. 55,678

Attorney for Applicants

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, ILLINOIS 60610  
(312) 321-4200